Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	CC Docket No. 92-297
Rulemaking to Amend Parts 1,2,21, and 25 to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services	)	
and	)	
Suite 12 Group Petition for Pioneer's Preference	)	PP-22

TO: The Commission

COMMENTS OF THE SATELLITE INDUSTRY ASSOCIATION

Cheryl A. Tritt
Diane S. Killory
Eric N. Richardson
MORRISON & FOERSTER
2000 Pennsylvania Avenue, N.W.
Suite 5500
Washington, D.C. 20006
(202) 887-1500

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Pursuant to the Third Notice of Proposed Rulemaking And Supplemental Tentative Decision ("NPRM") released by the Commission on July 28, 1995, in the above-captioned proceeding, the Satellite Industry Association ("SIA") hereby submits its Comments on the competitive bidding proposal outlined in the NPRM. SIA agrees with the Commission that "a wealth of innovative services" will be provided by satellite companies if they are given access to the 28 GHz frequency band,[1] but strongly objects to the Commission's proposal to employ auctions for the award of satellite licenses.

[1] NPRM at ¶¶ 2,4.

INTRODUCTION AND SUMMARY

SIA is a new association, formed in the Spring of 1995, to represent leading U.S. satellite manufacturers, operators, launch companies and service providers.[2] SIA was formed with the specific purpose of bringing its members' expertise to bear on policy issues affecting the satellite industry, such as spectrum allocation, the National Information Infrastructure and the Global Information Infrastructure ("NII and GII") and technology convergence. Because the NPRM's proposals will specifically affect the businesses of SIA's members, SIA takes this opportunity to make clear its opposition to auctions for satellite spectrum and to underscore the need to make adequate spectrum available for satellites and their development.

The use of competitive bidding to award satellite licenses will retard the development and deployment of new technologies to the public and will not serve the public interest for a number of reasons. First, auctioning satellite spectrum is premature and contrary to the Commission's statutory mandate to exhaust other means of resolving mutual exclusivity. Traditional Commission mechanisms for conserving spectrum, such as negotiated sharing arrangements, reduced orbital spacing and strict financial requirements, are more consistent with the Commission's statutory mandate than are satellite auctions. Second, satellite services are unique and not comparable to other auctioned services, such as personal communications services ("PCS"), because of their inherently international scope. Auctioning of satellite

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[2] SIA has been initially organized as an operating arm of the Satellite Broadcasting and Communications Association ("SBCA") representing the U.S. satellite industry. SIA's members are: AT&T Skynet Services, American Mobile Satellite Corp. ("AMSC"), Arianespace Inc., COMSAT, Inc., GE American Communications Inc., Global Access Telecommunications Services, Inc., Hughes Communications, Inc., Iridium, Inc., Keystone Communications, Lockheed Martin Astro Space, Orbital Sciences Corp., Orion Network Systems Inc., PanAmSat Corporation, Space Systems/Loral Corp., and Teledesic Corporation. These comments, the first SIA has filed, represent a consensus view of SIA's members.

spectrum in the U.S. would set a destructive precedent that is likely to interfere with the growth and development of the global satellite industry and to impede implementation of the global information infrastructure. Rather than inject additional risks, uncertainties and costs to a strong U.S. industry, the Commission should continue to rely on the wealth of technical, negotiated and regulatory solutions that have historically ensured that no fixed satellite applications ultimately have been found mutually exclusive.

As the NPRM recognizes, the 28 GHz band will be the future home of innovative, cutting edge satellite communications services for both the U.S. and international markets.[3] Many of SIA's members have filed applications to launch satellites operating in this band, while others anticipate filing such applications or are involved in other satellite licensing proceedings for which auctions have been suggested. Orderly and rational licensing of this spectrum band is critical to the business objectives of the satellite industry and its continuing leadership role in the U.S. economy and the global communications environment.

The NPRM acknowledges the central role that the satellite industry has played in the U.S. economy:

> [S]atellites have significant potential to stimulate economic growth in the United States and abroad. The United States has led the world in developing and implementing satellite technology and the satellite proposals before us represent an opportunity for the United States to continue its leadership role through enhanced communications infrastructures and services.[4]

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[3] NPRM at ¶17.

[4] Id.

As a national and global leader, the U.S. satellite industry has fueled job growth in the United States and the development of communications opportunities and infrastructures abroad.[5] The satellite industry has been a positive factor in the U.S. balance of trade, with export earnings from the space commerce industry generally totaling $700 million in 1993 and expected to increase more than 128 percent in 1994 to a total of $1.6 billion.[6] In fact, virtually every commercial satellite in operation today contains some U.S. technology.[7]

The U.S. satellite industry has also grown at an unprecedented pace, allowing development of a wealth of innovative services, including two-way video, teleconferencing, telemedicine, telecommuting, data services and global fixed and mobile networks.[8] This growth includes new entrepreneurial service providers, as well as companies with significant experience in the satellite industry. According to the most recent figures released by the Commerce Department, revenues from satellite services, including fixed and mobile services, totaled $1.85 billion in 1993, an increase of 23 percent from $1.5 billion in 1992.[9] Including satellite ground equipment and commercial satellite revenues, the revenues for the satellite industry totaled $4.45 billion in 1993, and the Commerce Department expected them to increase to more than $5.5 billion by 1994.

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[5] See, e.g., Arthur D. Little, Inc., Impact of COMSAT Mobile Communications Programs on the U.S. Economy, Background Paper (Dec. 1993) (estimating that activities of Inmarsat alone will generate/sustain over 26,000 new jobs in next ten years).

[6] U.S. Industrial Outlook 1994 at 28-2. The space commerce industry includes satellite ground equipment, commercial satellite revenues, satellite services, remote sensing, commercial space launches, materials research and processing in space, and space-based private research and development.

[7] Id. at 28-1.

[8] NPRM at ¶2.

[9] U.S. Industrial Outlook 1994 at 28-1.

In light of the significance of the satellite industry to the U.S. economy and global telecommunications services, SIA urges the Commission to act with extreme caution before taking steps, such as auctioning of satellite spectrum, licenses and/or orbital slots, that would jeopardize the U.S. satellite industry's ability to maintain its position as a global leader.

DISCUSSION

I. THE PROPOSAL TO AUCTION SATELLITE SPECTRUM CONFLICTS WITH THE COMMISSION'S STATUTORY MANDATE

A. Section 309(j) Limits The Use Of Auctions To Situations Of Mutual Exclusivity And Requires The Commission To Use Traditional Methods To Avoid Mutual Exclusivity

The overriding theme of Section 309(j) of the Communications Act is that the Commission's authority to use competitive bidding is circumscribed by the Commission's obligations to avoid mutual exclusivity and to adhere to other policy goals.[10] Section 309(j)(1) authorizes the Commission to auction spectrum only where mutually exclusive applications for initial licenses or construction permits are accepted for filing by the Commission and where the principal use of the spectrum will involve or is reasonably likely to involve the receipt by the licensee of compensation from subscribers in return for enabling those subscribers to receive or transmit communications signals.[11] The Act emphasizes that the Commission shall not be relieved of its *"obligation in the public interest to continue to use engineering solutions, negotiation, threshold qualifications, service regulations, and other means in order to avoid mutual exclusivity in application and licensing proceedings...."*[12] As the then-Chairman of the

[10] 47 U.S.C. § 309(j)(1) (1995) (emphasis supplied).

[11] Id.; see also NPRM at ¶129.

[12] 47 U.S.C. § 309(j)(6)(E) (1995).

Commerce Committee of the House of Representatives explained in a letter to then-FCC Chairman James Quello:

> As a general proposition, by granting to the Commission the authority to assign licenses by auction, it was never the intent of Congress for auctions to replace the Commission's responsibilities to make decisions that are in the public interest. Rather, the competitive bidding authority was always intended to address those situations where the Commission *could not* either narrow the field of applicants or select between applicants based upon substantive policy considerations. . . . To underscore that auctions are not a substitute for reasoned decision-making, the new statute provides (at Section 309(j)(6)(E)) that the Commission is not to abandon its traditional methods of avoiding mutual exclusivity.[13]

In addition, Section 309(j) requires that the Commission include safeguards to protect the public interest in the use of the spectrum and to ensure that other important communications policy objectives are not sacrificed to the interest of maximizing public revenues via auctions.[14] Additional objectives set forth in Section 309(j)(3), which the Commission must pursue, include: development and rapid deployment of new technologies, products and services for the benefit of the public; promoting economic opportunity and competition and ensuring that new and innovative technologies are readily accessible; and efficient and intensive use of the electromagnetic spectrum.[15]

SIA is confident that the Commission can avoid mutual exclusivity entirely in its processing of 28 GHz satellite applications if it follows its traditional practices, including

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[13] Letter from John D. Dingell, Chairman, House Committee on Energy and Commerce, to James H. Quello, Chairman, Federal Communications Commission, at 2-3 (Nov. 15, 1993) (emphasis supplied).

[14] See 47 U.S.C. § 309(j)(3) (1995); H.R. Rep. No. 111 103d Cong., 1st Sess. 585 (1993).

[15] 47 U.S.C. § 309(j)(3) (1995).

technical, negotiated and threshold qualifications, thereby ensuring compliance with its statutory mandate and allowing all qualified satellite applications access to spectrum.

B. The Commission's Historical Success In Avoiding Mutual Exclusivity Dictates Against The Use Of Auctions For the 28 GHz Band

As described above, Section 309(j) permits the Commission to conduct auctions only when there is mutual exclusivity among applications accepted for filing that cannot otherwise be resolved. In unique contrast to all other telecommunications services, the Commission has always been able to avoid finding satellite applications to be mutually exclusive. If the Commission merely continues these policies, competitive bidding for satellite services will not only be unnecessary, it would also be prohibited under Section 309(j) because the requisite mutual exclusivity will not exist.

Historically, the Commission has avoided finding competing satellite applications to be mutually exclusive. In the Ku and C-bands, for example, the need to preserve spectrum motivated the Commission to adopt flexible policies to accommodate multiple applicants, avoiding characterizing applications as mutually exclusive whenever possible.[16] Thus, even when applicants initially requested identical geostationary orbital slots, the Commission avoided findings of mutual exclusivity by flexible assignment of orbital slots.[17] Such solutions have also worked in other services. With the so-called "little LEO" (low-earth orbiting) satellites, the Commission recently convened successful negotiated rulemakings to craft spectrum sharing

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[16] GTE Satellite Corp., 93 F.C.C. 2d 832, 840 (1983) ("[T]he objective of our policies and procedures has been to accommodate as many applicants as is efficiently possible with a minimum of administrative costs or delays. In particular, artificial or inflexible definitions of mutual exclusivity have been avoided and an increasing number of satellites have been authorized to satisfy growing demand.").

[17] Id. at 839 & n.15.

proposals and technical rules to accommodate multiple systems that were initially found to be mutually exclusive.[18] Similar results have been reached with Direct Broadcast Service satellites ("DBS"), for which the Commission's interim and final processing orders reaffirmed that orbital slots would continue to be considered interchangeable in order to avoid situations of mutual exclusivity.[19]

With respect to geostationary/fixed satellite services ("GSO/FSS"), the Commission clearly has the tools to ensure that apparently conflicting applications need not be found mutually exclusive.[20] Indeed, the Commission has already demonstrated its ability to use technological and negotiated solutions to avoid mutual exclusivity and uphold the Section 309(j) policy of conserving spectrum. These solutions have included spectrum sharing plans, negotiation, reduced orbital spacing, and other arrangements, all of which the Commission must pursue before planning for a spectrum auction.[21] In its Reduced Orbital Spacing Order, for example, the Commission found that:

> [N]ew ways to maximize use of the orbital spectrum must be found if increasing demands for domestic fixed satellite service are to be met. The Commission

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[18] See, e.g., Application of Volunteers in Technical Assistance for Authority to Construct Launch and Operate a Non-Voice, Non-Geostationary Mobile Satellite Service, 1995 FCC LEXIS 4974 at *3-*4.

[19] Application of Hughes Communications Galaxy, Inc. To Establish a Direct Broadcast Satellite System, 1985 FCC LEXIS 2731; Processing Procedures Regarding the Direct Broadcast Satellite Service, 95 F.C.C. 2d 250, 253 (1983).

[20] See also 47 C.F.R. § 100.13 (1995).

[21] NPRM at ¶ 136; see also, Filing of Applications For New Space Stations In the Domestic Fixed-Satellite Service, 93 F.C.C. 2d 1260, 1261 n.7 (exploring further orbital spacing reductions, strict licensing criteria or exclusion of speculative proposals to avoid mutually exclusive applications); Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to A Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Bands, Report and Order, 9 FCC Rcd 5936, 5944, 5945 (1994) (noting that spectrum sharing plans or subsequent events prior to launch could help to avoid mutually exclusive applications) ("Big Leo Report and Order").

> adopted a policy to reduce the spacing between satellites to two degrees over the next decade so that more satellites can be accommodated.[22]

In the 28 GHz band the Commission should continue to use licensing procedures such as these because they advance the statutory policy of making efficient use of spectrum, and also resolve potentially conflicting applications while maximizing the number of satellite operations with access to orbital spectrum.

Similarly, the Commission should continue to impose "its strong preference" for "strict qualifications standards" to avoid what would otherwise be mutually exclusive applications and thus to "avoid the need to select alternative approaches [such as auctions or lotteries]."[23] The Commission has required strong financial, legal and technical showings from applicants to ensure that they can provide the services set forth in their applications. The enormous expense of operating and launching a satellite system makes such showings critical components of the Commission's satellite licensing process. The requirement of a strong showing that an applicant has or can acquire the financial and technical resources to be a successful service provider has effectively limited the number of applications and avoided unnecessary situations of mutual exclusivity. Similar requirements are likely to have the same effect in the 28 GHz band and should be adopted.

Further, the Commission's traditional methods of resolving mutual exclusivity best uphold the objectives of Section 309(j) by promptly making services available to consumers

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[22] Establishment of An Advisory Committee on Implementation of Reduced Orbit Spacing Between Domestic Fixed Satellites, 102 F.C.C. 2d 390 (1985), summarizing Licensing of Space Stations in the Domestic Fixed-Satellite Service, 54 Rad. Reg. 2d (P & F) 577 (1983).

[23] Licensing Space Stations in the Domestic Fixed-Satellite Service, Notice of Proposed Rule Making, 101 F.C.C. 2d 223, 229 (1985) ("Space Station Licensing NPRM"); see also, Big Leo Report and Order at 5954-63.

and maximizing the number of satellite licensees. Auctions could frustrate those objectives because they are likely to delay introduction of new innovative satellite services.[24] Auctions also could frustrate the Commission's goal of distributing licenses broadly to a diverse group of licensees. In fact, the Commission has previously noted a preference to avoid auctions specifically for satellite licensing because of excessive "administrative problems" associated with both lotteries and auctions.[25]

Finally, it is premature for the Commission to auction satellite spectrum because there is no evidence that mutually exclusive situations will ever arise in the 28 GHz band. Although the Commission's NPRM admits that "it is premature to determine whether mutual exclusivity will occur," the NPRM nonetheless proceeds to propose rules for competitive bidding and only pays minimal attention to steps that would prevent mutually exclusive applications.[26] A large number of orbital positions remain available for geostationary fixed satellite services in the 28 GHz band. Rather than adopt procedures for auctions that could be unnecessary, the Commission should instead use its best efforts to avoid mutual exclusivity. Quite simply, unless and until the Commission receives more qualifying, irreconcilable applications for this band than the number of orbital positions, no sound policy or legal reason exists to implement satellite auction rules.

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[24] Space Station Licensing NPRM at 229.

[25] Id.

[26] NPRM at ¶136.

II. AUCTIONS ARE NOT SUITABLE LICENSING MECHANISMS FOR SATELLITES BECAUSE SATELLITES ARE INHERENTLY INTERNATIONAL IN SCOPE

In its recent NPRM proposing a single regulatory scheme for all domestic and international service provided by U.S.-licensed FSS/GSO satellites, the Commission acknowledged the inherently international nature of satellite systems and argued that distinctions between domestic and international satellites are no longer meaningful for purposes of regulatory oversight of U.S. fixed satellite operations in the C and Ku-bands.[27] The Commission noted that:

> Since our Transborder and Separate Systems Policies were developed in the 1980s, there has been an increasing trend towards a globalized economy. Corporations are becoming increasingly multinational in character, including most of the major U.S. corporations....Users whose communications requirements were once wholly domestic now find they need international space segment capacity to satisfy private-line and other two-way service requirements....Given the globalization of communications needs, we do not believe it advisable to administer two separate policies when U.S. space station operators seek to offer similar services to similar geographic areas. Rather, we believe the public interest would be best served by modifying our policies to reflect the global nature of the telecommunications needs today.[28]

The Commission should similarly acknowledge the inherently international nature of satellite systems in this proceeding and recognize that, for the following reasons, auctioning of satellite spectrum is uniquely inappropriate.

First, the Commission cannot use its experience in previous auctions as a basis for assuming that competitive bidding is appropriate for distributing satellite spectrum. Satellite operations are readily distinguishable from the locally oriented, terrestrial services upon which

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[27] Amendment to the Commission's Regulatory Policies Governing Domestic Fixed Satellites and Separate International Systems, IB Docket No. 95-41, Notice of Proposed Rulemaking, FCC 95-146 (Apr. 25, 1995) and Comments in response to same.

[28] Id. at ¶¶16-17; see also id. at ¶22 ("Newer generations of satellites, however, can be better configured to provide both international and domestic services on a co-primary basis.").

the Commission has modeled its auction processes. In the recent broadband PCS auctions, for example, a number of mutually exclusive applicants competed for rights to serve well-defined, domestic trading areas. Applicants were able to formulate an informed auction strategy knowing that a high winning bid (and FCC approval of subsequently filed Form 600 applications) was essentially the end of the licensing process. As domestic service providers, PCS bidders required no other regulatory authorizations in order to begin immediate construction of their networks.

By contrast, U.S. satellites that will be licensed in the 28 GHz frequency band will have footprints that cover regions beyond the U.S., with some anticipating global coverage. Unlike the PCS licensing process, prospective FCC satellite auctions would be only one element of an international authorization process that must be navigated before potential satellite operators can begin operations. Because receipt of a U.S. authorization to construct and launch a satellite clearly opens the door to significant international satellite service opportunities, the Commission's passing statement in the NPRM that it is "not auctioning access rights to other countries,"[29] does not change the international nature of such services. Unless a U.S. satellite operator proposing international service has already received authorization from all potential foreign service areas, such an operator cannot know the parameters of the international market it ultimately will serve. This, in turn, will make it quite difficult for such a potential licensee to establish an informed auction strategy for competitive bidding for a U.S. license.

Satellite auctions are also unlike the Commission's previous spectrum auctions for terrestrial services in that satellite spectrum has always been treated as fungible. While some details of the proposed satellite auction remain unclear, auctions of specific orbitals would

[29] NPRM at ¶128.

undercut the long-standing theory of fungibility of satellite orbitals -- a theory that has guided Commission satellite licensing procedures to date and which has aided development of the satellite industry. Auctions of specific orbital locations could create artificial mutual exclusivity by undermining the flexibility arising from fungible orbital positions.[30]

Second, and perhaps more significantly, FCC auctions for satellite licenses will create international barriers to global and regional satellite operation and raise costs excessively. Current applicants for the 28 GHz band clearly intend to provide services and compete on an international basis.[31] Because of the global nature of these satellite services, a U.S. license is only one of many authorizations and approvals that a U.S. satellite system operator will require. Thus, international assignment procedures significantly affect this industry.[32] For example, a U.S. satellite operator will require landing rights or other authorizations from foreign jurisdictions before transmitting into foreign territory.[33]

Should the FCC establish a regime of competitive bidding for any U.S. satellite licensees, it likely would result in other countries following the lead of the United States and also

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[30] The fungible nature of satellite orbitals helps to avoid mutual exclusivity because it is easier to devise sharing schemes or other negotiated solutions for spectrum that is fungible.

[31] Many of the pending applications by SIA members propose international operations, including the Hughes, Loral and Teledesic Applications discussed in the NPRM. See NPRM at ¶¶19, 21 & 23.

[32] International coordination is accomplished through the ITU, the WARC 95 conference and other international proceedings. Even domestic satellite systems must participate in an international frequency coordination process that can be contentious. For example, AMSC, which is licensed to provide domestic mobile satellite service, is subject to what has been an intensive international frequency coordination process with other foreign mobile satellite systems that seek to use the same bands as AMSC.

[33] Although their position has been widely rebuffed, the Equatorial nations claim rights to the geostationary orbital slots located over their territory and suggest that authorization is required from them for use of those slots.

implementing auctions for satellite licensing.[34] Sovereign pride and the need for hard currency could motivate foreign nations to use the price charged in a U.S. satellite auction as a target in pricing their own satellite licenses. Distinctions the Commission may draw that would limit competitive bidding only to *domestic* services or to specific types of satellites are unlikely to be noticed by foreign governments deciding how to price their satellite licenses. Rather, the symbolism of U.S. auctions generating high licensing fees for satellite spectrum is the precedent that would likely gain notice and be followed internationally.[35]

Moreover, a U.S. policy of auctioning satellite spectrum could have the unintended and undesirable effect of encouraging foreign regulators to discriminate against U.S. companies in their satellite licensing. Auction procedures used abroad could result in unfair or discriminatory treatment of U.S. firms, especially where satellite systems licensed in the U.S. compete with satellite systems licensed by those countries, including systems owned by the very foreign governments that will regulate U.S. landing rights. Then-Chairman Quello identified this potential for discrimination in a letter to Congress, in which he urged that Congress:

> . . . [B]e mindful of the potential ramifications [of spectrum auctions] on international telecommunications service providers who utilize spectrum in other countries as well as in the United States. For example, requiring use of competitive bidding for low earth orbiting satellite system licenses in this country might subject those licensees to exorbitant payment requirements for access to spectrum in other countries. I am particularly concerned that some foreign

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[34] See Commissioner Rachelle Chong, Testimony Before the House Budget Committee Hearing on Competitive Bidding Procedures, at 1 (Sept. 29, 1994) ("One of the top three questions I have been asked by the Ministers and Deputy Ministers of Telecommunications with whom I have been meeting involves the success of our new auction process of licensing. . . . It is clear from these questions that the United States is perceived as a leader in this area, and that other countries are watching our progress closely.")

[35] Professor Eli M. Noam, Columbia University, Testimony Before the U.S. Senate Committee on Commerce, Science And Transportation, at 2 (July 27, 1995) ("American firms will pay dearly for this auction system abroad. There will be auctions everywhere, in any country chasing hard currency, and our companies will do a major part of the paying."); see also, Larry F. Darby, Darby Associates, Policy Implications of Spectrum Valuation and License Auctions, Report to the Senate Commerce Committee (July 27, 1995).

> governments opposed to the use of our international telecommunications accounting and auditing standards could use our competitive bidding requirement as a justification for retaliatory measures.[36]

Commissioner Hundt recently confirmed that auctions of international satellite spectrum are problematic:

> [I]nsofar as the satellite service in question is international, we are very seriously concerned that you could not run a fair auction. An unfair auction is a bad idea. . ..You can trigger a process in which a price is paid here and the next country says, 'I'm the next link in the chain, we'll do our auction, except ours is rigged by the government in our way. . . . It translates to, 'Just pay us more than you did in the United States, . . .[37]

Finally, the proliferation of auctions or other steep licensing fees in foreign countries that is likely to be triggered by U.S. auctions for satellite licenses would undermine U.S. policies supporting establishment of a global information infrastructure ("GII").[38] The Administration's GII policy is based on principles that include universal service, promotion of competition and creation of a flexible regulatory environment. Under the GII, governments are encouraged to remove barriers to competition in telecommunications and to establish transparency of regulations and charges.[39] A U.S. program that encourages auctioning of satellite spectrum will undermine these goals, both by encouraging other countries to establish similarly costly barriers to satellite service entry and by encouraging a non-uniform system of

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[36] Letter from James H. Quello to Members of Congress (June 23, 1995), 139 Cong. Rec. S7913, S7950 (daily ed. June 24, 1993) (legislative history of Omnibus Budget Reconciliation Act of 1993) ("Quello Letter").

[37] FCC Chairman Acknowledges International Auction Threat, Mobile Satellite News, Sept. 7, 1995, at 1.

[38] Clinton Administration Report on the Global Information Infrastructure "Agenda For Cooperation," Daily Report For Executives, Feb. 16, 1995, at M-1, M-4-M-9.

[39] Id.

satellite licensing.[40] By adding additional costs, auctions also undermine the possibility of providing universal service. In short, satellite auctions would undermine the uniformity and predictability needed to encourage the GII and demonstrate that auctions are not an appropriate way to allocate satellite orbital spectrum.

III. SATELLITE AUCTIONS WOULD IMPEDE FINANCIAL SUPPORT NECESSARY FOR CONTINUED GROWTH OF THE SATELLITE INDUSTRY

As discussed above, the U.S. satellite industry is clearly a leader, not only of the American economy, but in the worldwide telecommunications environment. The extensive costs that are likely to be triggered by auctioning satellite spectrum could do serious damage to the strength and competitive well-being of this industry.

As the Commission knows, the costs of planning, designing, manufacturing, insuring and launching satellite services are extremely high even without auctions. For the next generation of services utilizing the 28 GHz band, these costs will be even higher. For example, the estimated costs for a two-satellite geostationary Ka-system are as follows:

Market assessment and technology specification	$ 3,000,000
Technology Development	12,000,000
Satellite acquisition with some degree of sparing (2 satellites plus a partial spare)	330,000,000
Satellite Launches (2)	200,000,000
Insurance @ 20%	100,000,000
Satellite control and connectivity to the terrestrial communications network	85,000,000
Program Management	10,000,000
Total	$740,000,000[41]

[40] For example, the terms of a satellite license auctioned in a foreign jurisdiction may vary significantly from those in a U.S. auctioned license. Such variance, especially in technical specifications, would add to the difficulty of operating a satellite system on a global or regional basis; see also, Quello Letter.

[41] The figures in this chart are a compilation of cost information submitted by applicants for Ka-band systems. See, e.g., Application of Hughes Communications Galaxy, Inc., File No. 3-DSS P/LA-94 & 4-DSS P/LA-94 (filed Dec.

Costs for a non-geostationary fixed satellite system proposed for this band are even higher, totaling as much as $9 billion.[42]

In addition to these massive capital outlays, the satellite industry faces unique risks and extensive lead times that make it difficult to obtain financing for such projects. Satellites can require five years or more to develop and launch and have substantial risk factors (such as the risk of launch failure and the limited life of the satellite). These substantial risks and the significant length of time until returns can be received make it difficult to obtain suitable investors even under the best and most certain of regulatory environments. Auctions for satellite spectrum (both in the U.S. and internationally) add to this uncertainty by making it impossible to know whether a potential global satellite operator will receive landing rights for all destinations to which it wishes to transmit. Investors would thus be even less willing to provide the financing necessary to participate in an auction if these uncertainties are added on top of the inherent risks and long-term horizon associated with satellite ventures.

Added auction costs also could have other unintended negative consequences for the satellite industry, such as dissuading innovation, discouraging further entry into the industry, and undermining continued growth such that development of the U.S. satellite industry would be chilled.[43] This is especially true in light of the variation of satellite services and the different

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3, 1993); Application of Loral Aerospace Holdings, Inc., File No. 109-SAT-P/LA-95 ; S2163 & 110-SAT-P-95; S2164 (filed May 1, 1995). The figures do not reflect the costs of any specific satellite operator.

[42] See Application of Teledesic Corp., File No. 22-DSS-P/L-94 (filed Mar. 24, 1994) .

[43] See Mobile Satellite Industry Still Not Keen On Auctions, Satellite Week, May 8, 1995 ("Auctions could spread to point where no global satellite operators could make money.").

uses to which the same spectrum could be put. While the Commission has previously recognized the value of maintaining diverse satellite services and the benefit of allowing satellite operators the freedom to develop unique business plans, such freedom may be undermined by auctions that encourage using spectrum for services that produce immediate returns, rather than exploration of innovative services.[44] Over the long-term, auctions could thus discourage development of the most innovative satellite services, undermining both the Commission's objectives and the growth of the industry.

Finally, the specter that a U.S. policy of auctioning spectrum might be followed internationally could undermine many of the most promising global satellite technologies. If a satellite operator had to purchase landing rights at an auction in each of multiple countries, for instance, its costs and uncertainty would multiply according to the number of countries it attempts to serve. Placing these costs on top of the U.S. auction price and the already high cost of constructing and operating a satellite system would make it virtually impossible to obtain financing to support launch of a new global satellite system.

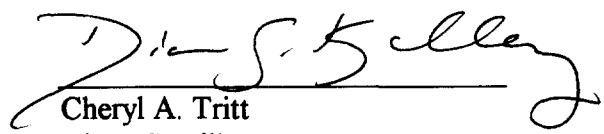
[44] NPRM at ¶2 ("Flexible service rules will also promote the efficient use of scarce spectrum by allowing providers to adjust and respond to changes in technology and market demand."); see also, Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Bands, Notice of Proposed Rule Making, 9 FCC Rcd 1094, 1100-01 (1994) ("When possible, we prefer to leave spacecraft design decisions to the space station licensees because the licensees are in a better position to determine how to tailor their systems to meet the particular needs of their customer base.").

CONCLUSION

For these reasons, the SIA urges the Commission not to auction spectrum for satellite services in the 28 GHz band. Rather, the Commission should follow its statutory mandate and continue to pursue policies that avoid mutual exclusivity in satellite licensing.

Respectfully submitted,

THE SATELLITE INDUSTRY ASSOCIATION



Cheryl A. Tritt
Diane S. Killory
Eric N. Richardson
MORRISON & FOERSTER
2000 Pennsylvania Avenue, N.W., Suite 5500
Washington, D.C. 20006
(202) 887-1500

Its Attorneys

September 7, 1995

CERTIFICATE OF SERVICE

I, Eric N. Richardson, an attorney in the law firm of Morrison & Foerster, do hereby certify that copies of the foregoing **COMMENTS OF THE SATELLITE INDUSTRY ASSOCIATION** were hand delivered on this 7th day of September 1995 to the following:

William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Chairman Reed E. Hundt
Federal Communications Commission
1919 M Street, N.W., Room 814
Washington, D.C. 20554

Commissioner James H. Quello
Federal Communications Commission
1919 M Street, N.W., Room 802
Washington, D.C. 20554

Commissioner Andrew C. Barrett
Federal Communications Commission
1919 M Street, N.W., Room 826
Washington, D.C. 20554

Commissioner Rachelle B. Chong
Federal Communications Commission
1919 M Street, N.W., Room 844
Washington, D.C. 20554

Commissioner Susan Ness
Federal Communications Commission
1919 M Street, N.W., Room 832
Washington, D.C. 20554

Scott B. Harris
Chief, International Bureau
Federal Communications Commission
2000 M Street, N.W., Room 800
Washington, D.C. 20554

Diane Cornell
Chief, Telecommunications Division
International Bureau
Federal Communications Commission
2000 M Street, N.W., Room 800
Washington, D.C. 20554

Jennifer Warren
Special Advisor, International Bureau
Federal Communications Commission
2000 M Street, N.W., Room 800
Washington, D.C. 20554

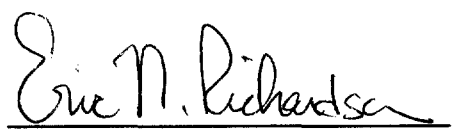
Regina M. Keeney
Chief, Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W., Room 5002
Washington, D.C. 20554

William E. Kennard
General Counsel
1919 M Street, N.W., Room 614
Washington, D.C. 20554

Donna Bethea
Satellite and Radiocommunications Division
International Bureau
Federal Communications Commission
2000 M Street, N.W., Room 5002
Washington, D.C. 20554

Cecily C. Holiday
Deputy Chief
Satellite and Radiocommunications Division
International Bureau
Federal Communications Commission
2000 M Street, N.W., Room 5200
Washington, D.C. 20554

Susan E. Magnotti
Private Wireless Division
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W., Room 6310
Washington, D.C. 20554



Eric N. Richardson